

AMENDMENTS TO THE SPECIFICATION:

Pages 9 through 11 of Translation

Please replace all of the paragraphs for Examples 1, 2, 3, and 4 with the following amended paragraphs:

Example 1

The room temperature magnetic refrigerant ~~[[is]]~~ was made by stacking the sheet units of the material which ~~[[is]]~~ was 0.1 mm thick. The thickness of the stacked units ~~[[is]]~~ was 5 mm. A truncated cone of 1 mm diameter and 0.05 mm height ~~[[is]]~~ was inserted between the two sheet units at a 5 mm interval and the fluid path ~~[[is]]~~ was so obtained. The sheet unit ~~[[is]]~~ was comprised of two copper sheets of 0.01 mm thickness. A liquid oxidation resistant thermal conductive agent gallium ~~[[is]]~~ was suffused therebetween. The liquid gallium stated above ~~[[is]]~~ was dopped with room temperature magnetic refrigerant material gadolinium to form room temperature magnetic refrigerant. The diameter of the refrigerant ~~[[is]]~~ was 0.005 mm. Impressions ~~[[are]]~~ were made about every 3 mm between the two copper sheets to form the small isolated areas. The process is described in detail as below:

1. ~~Machine~~ The room temperature magnetic refrigerant material gadolinium was machined into sheets; or crushed with water, ball grinded, plasma spray coated or ~~machine~~ the room temperature magnetic refrigerant material gadolinium was machined directly into gadolinium balls of suitable size of more than 0.005 mm.
2. ~~Prepare~~ Copper sheets of less than 0.01 mm thick were prepared.
3. ~~Seal~~ The room temperature magnetic refrigerant gadolinium balls and oxidation proof thermal conductive agent gallium were sealed between the two copper sheets. The gadolinium balls ~~should be~~ were packed densely. The material obtained as above ~~[[is]]~~ was then compressed into a sheet unit with the thickness of 0.1 mm. On the surface of the resulting sheet unit, truncated cones of 1 mm diameter and 0.05 mm

height ~~[[are]]~~ were placed every 5 mm apart. At a 3 mm interval, the copper sheets ~~[[are]]~~ were pressed together completely to form small isolated areas between the copper sheets.

4. ~~Stack~~ The sheet units were stacked and fixed ~~them~~ under pressure ~~to obtain so~~ the necessary mechanical strength was obtained. The pressure ~~shall~~ should not be too high so that a fluid path ~~[[is]]~~ was obtained. The thickness of the stacked sheet units ~~[[is]]~~ was 5 mm.
5. ~~Cut~~ The room temperature magnetic refrigerant obtained above was cut to desirable size to be applied in the room temperature magnetic chiller. The structure is shown in Fig. 2 and Fig. 3.

Example 2:

The structure and process of making the room temperature magnetic refrigerant ~~[[is]]~~ was basically the same as described in Example 1, except that the room temperature magnetic refrigerant material used ~~[[is]]~~ was a super-paramagnetic material with particle size of 0.001 mm; the thickness of the sheet units ~~[[is]]~~ was 0.05 mm; the spherical metal powders, 0.05 mm in diameter, ~~[[are]]~~ were dispersed between the sheet units and the thickness of the stacked sheet units ~~[[is]]~~ was 90 mm.

Example 3:

The room temperature magnetic refrigerant material ~~[[is]]~~ was gadolinium and the thermal conductive metal ~~[[is]]~~ was aluminum.

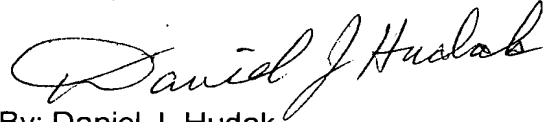
1. ~~The gadolinium was~~ mechanically crushed ~~the gadolinium~~ to balls with appropriate size of 0.025 mm in diameter.
2. ~~Melt~~ The aluminum was melted at 940 K under argon, and then ~~place~~ the gadolinium balls obtained from step 1 were placed into the molten aluminum.
3. ~~Compress~~ The aluminum and the gadolinium balls were compressed at 940 K and then cooled ~~[[it]]~~ down.
4. ~~Machine or otherwise process~~ The material obtained from step 3 was machined or otherwise processed to small balls with 0.25 mm in diameter. It is shown in Fig. 4.

Example 4:

As shown in Fig. 2, the molding process of composite material including high-thermal-conductor and room temperature magnetic refrigerant material comprises: cutting the room temperature magnetic refrigerant material such as gadolinium or Gd-Si-Ge alloy into sheets or filaments with section diameter less or much less than 0.1 mm; and inserting the high-thermal-conductor sheets or filaments of the similar size between the room temperature magnetic refrigerant material sheets or filaments were inserted to ensure full and close contact. The process includes: alternately stacking the room temperature magnetic refrigerant material gadolinium or Gd-Si-Ge alloy which [[is]] were rolled into sheets with copper or aluminum sheets; compressing the stacked sheets; and, cutting them into sheets, strips or filaments. The heat of the room temperature magnetic refrigerant [[is]] was mainly exchanged with outside through the high-thermal-conductor. As an aspect of this invention, the high-thermal-conductor [[is]] was aluminum.

Respectfully submitted,

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Attorney Docket No.: CNIP-B-PCT-US